DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017938 Address: 333 Burma Road **Date Inspected:** 17-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China

CWI Name: Chen Xi **CWI Present:** Yes No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ai Wei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Barrier Rail PCMK: W2-SB2-010-058

Welder: 203710 WPS-B-T-2132-3

PCMK: W2-SB2-001-028

Welder: 059450 WPS-B-T-2132-3

Components: Traveler Rail PCMK: 20TR2-035-017



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Welder: 215397 Report: B-WR15457

WPS-345-FCAW-1G (1F)-repair-1

Heat straightening of PCMK, E2-SB5-016, 20TR2-044 under approved Heat Straightening procedure, HSR 1(B)-9389, HSR (B)-362 The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ai Wei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 8mm and 80mm.

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC OC is identified as Ai Wei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3343-001-025/033, 046/281, 023/031, 107

Welder: 045280, 066155, 067877, 045170

WPS-B-T-2233-TC-U5-F-2

Heat straightening of PCMK, FB3317, VP3015 under approved Heat Straightening procedure, HSR 1(B)-9595, HSR (B)-420 The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ai Wei. The approved HSR procedure stated that a maximum temperature of 600°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 12mm and 40mm.

Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhan Hai Feng.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam PCMK: FB3286-001-090

Welder: 052696

WPS-B-T-2233-TC-U5-F-2

PCMK: FB3286-001-166

Welder: 055491

WPS-B-T-2233-TC-U5-F-2

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PCMK: FB3272-001-053

Welder: 044830

WPS-345-FCAW-2G (2F)-FCM-Repair-1

Components: Longitudinal Diaphragm

PCMK: LD3041-001-010,011

Welder: 208035 WPS-B-T-2132-3

Components: Bulk Head PCMK: SA3324-001-016

Welder: 206623

WPS-345-FCAW-2G (2F)-FCM-Repair-1

Bay 4

Heat straightening of PCMK, SA3362-001 under approved Heat Straightening procedure, HSR 1(B)-9614, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhen Hai Feng. The approved HSR procedure stated that a maximum temperature of 600°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 11mm.

Bay 6

This QA Inspector observed the following work in progress for Bay 6.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Huang Min.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Cross Beam PCMK: CB3002K-004-163

Welder: 053742 WPS-B-T-2134

PCMK: CB3002K-003-173

Welder: 053609 WPS-B-T-2134

Bay 7

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ciu Jun Jie.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Barrier Rail



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PCMK: W2-SB9-017-51~56

Welder: 062447 WPS-B-T-2132-3

Components: Deck Plate PCMK: DP3165-001-157

Welder: 051246

WPS-B-T-2232-TC-U4b-F

Heat straightening of PCMK, X4253B under approved Heat Straightening procedure, HSR 1(B)-9510, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ciu Jun Jie. The approved HSR procedure stated that a maximum temperature of 600°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 3mm.

Bay 8

This QA Inspector observed the following work in progress for Bay 8.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ciu Jun Jie.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector

Components: Bike Path PCMK: BK004A3-054-034

Welder: 500405 WPS-B-T-2132

PCMK: BK004A3-054-034

Welder: 504459 WPS-B-T-2132

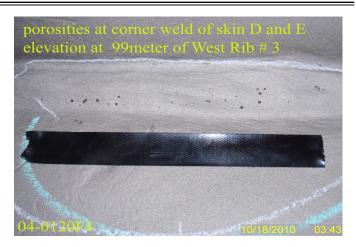
Blasting Shop #1

This QA inspector has performed Visual inspection after blasting, QA inspector was find out One location has reject able cluster porosity located at elevation mark is 99 meter at skin D and E. QA Inspector inform to ABF QA Inspector and ZPMC QC for follow up Repair inspection.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer